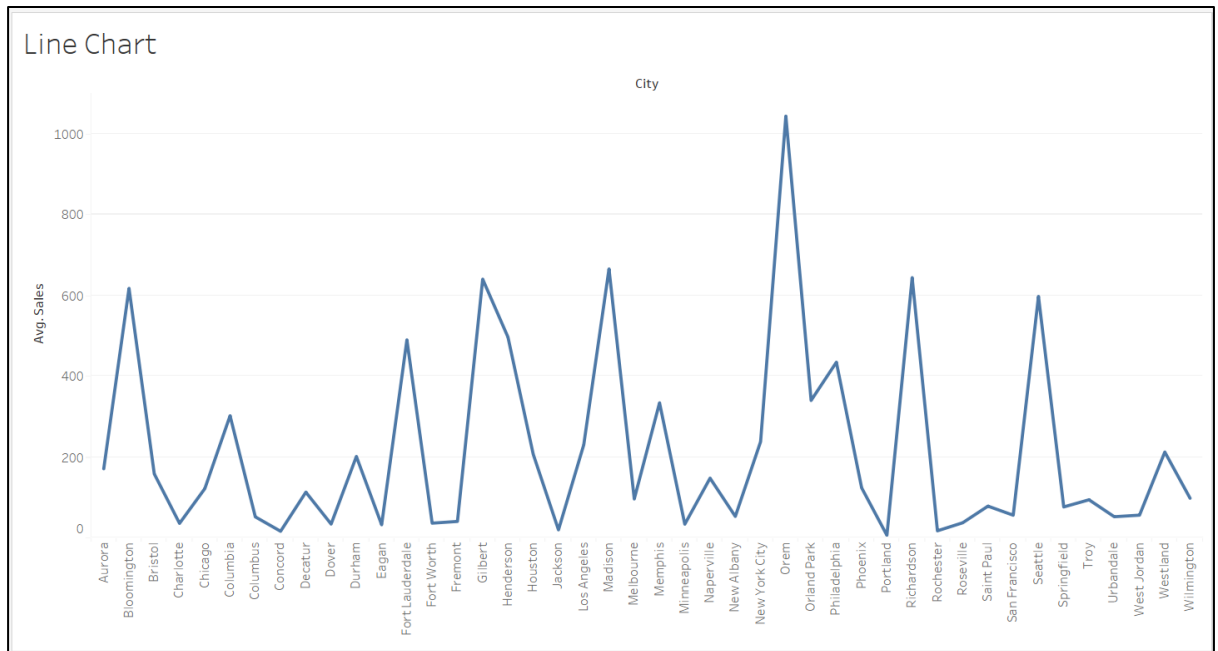


# ASSIGNMENT – 2

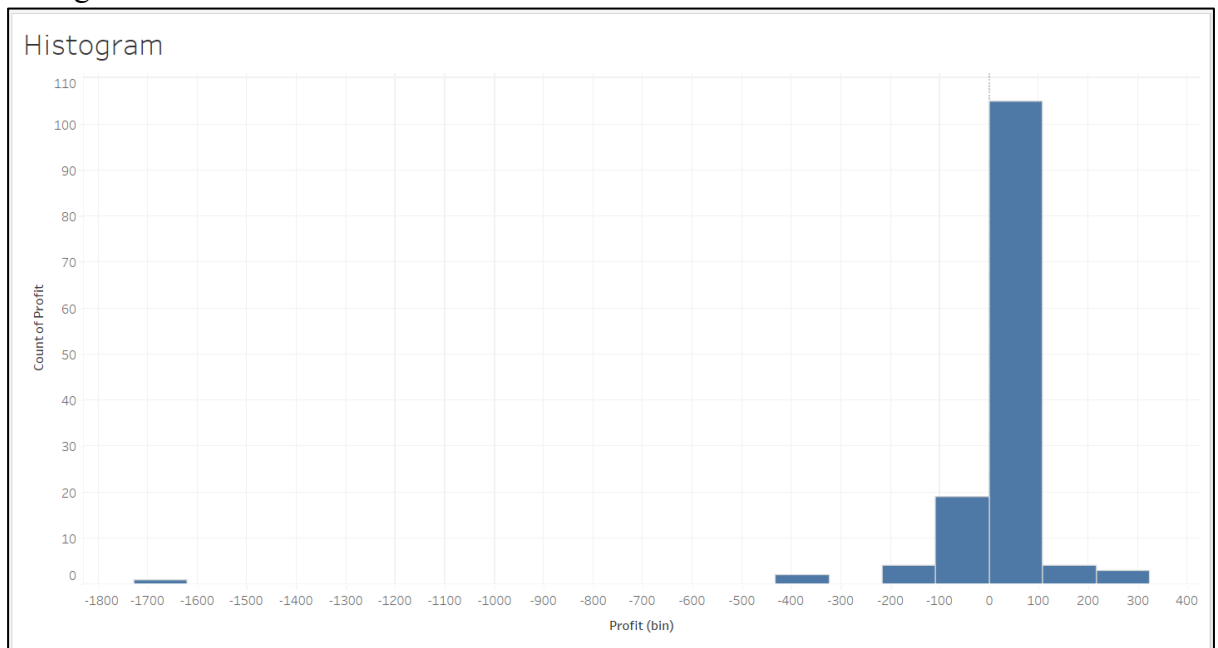
NAME : SHAH JATIN MANOJ  
REGISTER NUMBER : 20BIT0387  
CAMPUS : VIT, Vellore

1. Create any 7 data visualizations/charts and perform the following

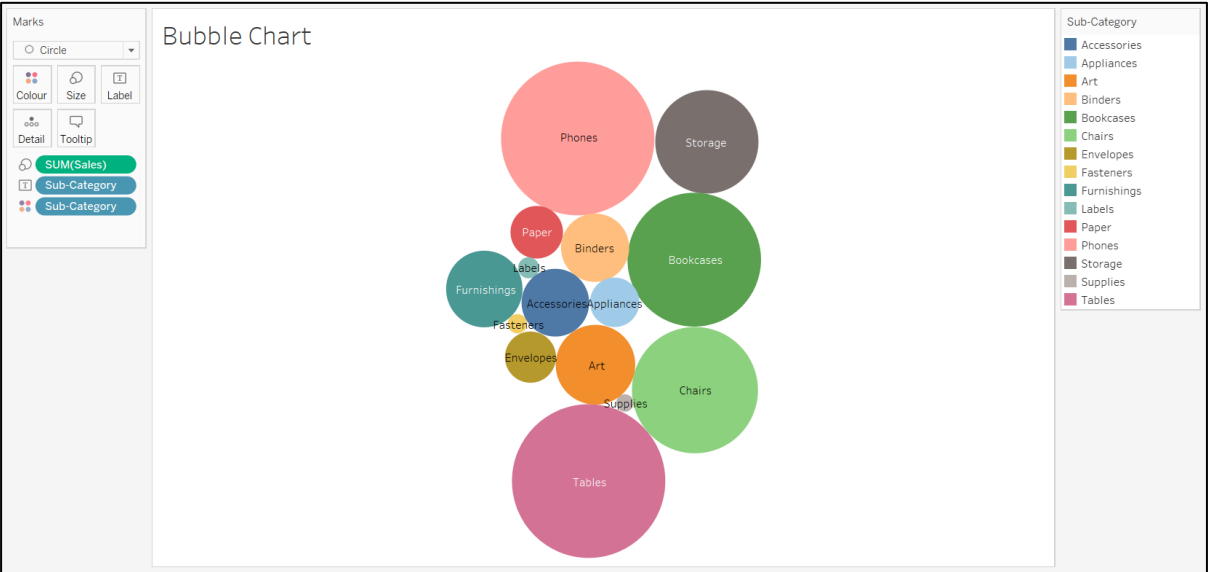
## 1.1 Line Chart



## 1.2 Histogram



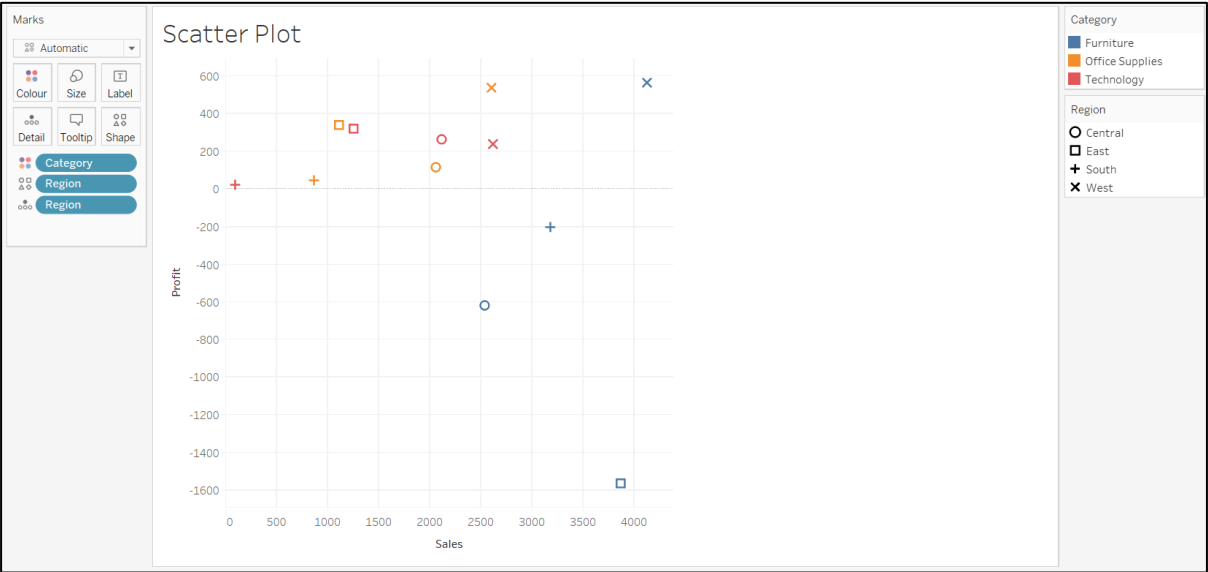
### 1.3 Bubble Chart



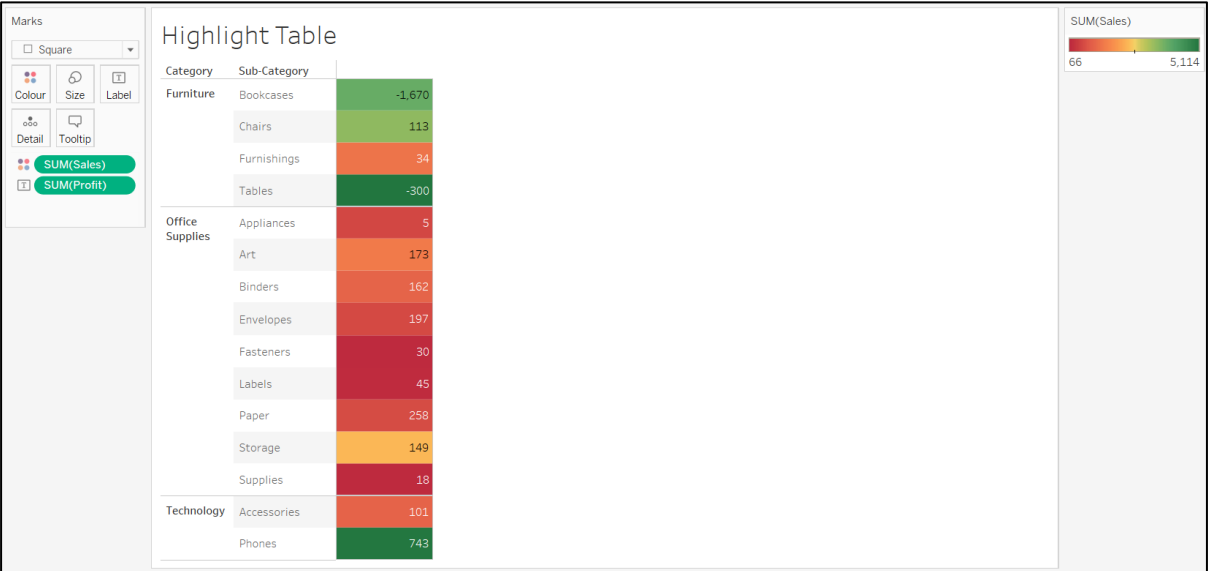
### 1.4 Box & Whisker Plot



### 1.5 Scatter Plot



### 1.6 Highlight Table



# 1.7 Text Table

Marks

Automatic

Colour

Size

Text

Detail

Tooltip

T

SUM(Sales)

Text Table

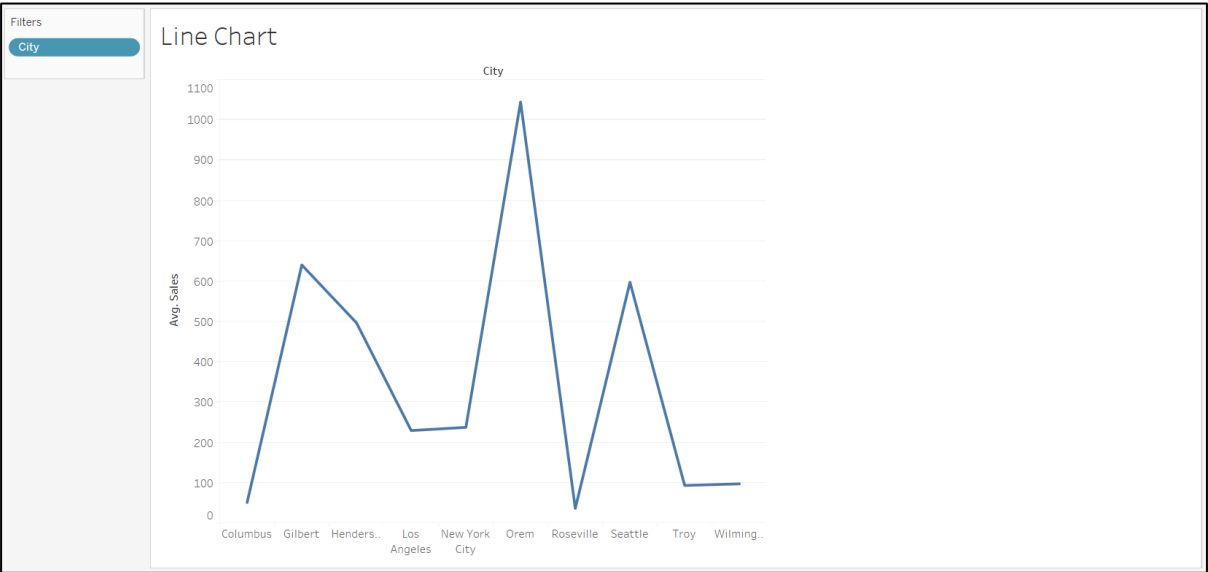
State

Sub-Category	Alab..	Ariz..	Calif..	Colo..	Dela..	Flori..	Illin..	Indi..	Iowa	Kent..	Mich..	Min..	Neb..	New York	North Caro..	Ohio	Oreg..	Pen..	South Caro..	Ten..	Texas	Utah	Virgi..	Was..	Wisc..
Accessories			105	239	45		436					66		30	74										
Appliances	208		115									78	60								69				
Art		1,113	62					76					19	2	3			102							
Binders	17	2	206		31		2	38	27			50		53			6	10		158	4				408
Bookcases										262								3,083			532				
Chairs			81				213	90		732				319				71	302	832	813				
Envelopes					115										201	135		3			113				
Fasteners			4											15		62									
Furnishings			410	102	47			6				53		138				207		97	210				
Labels			15					75				6													
Paper			209				65				19	37		47	16	102				29			76		
Phones		168	2,106		90		147							1,030	28	60				1,469					
Storage		244	99		227	118	230			212				209						73	186	56			666
Supplies			66																						
Tables			1,706			958	618														1,045				788

2. Apply dimension filter, context and measure filter on any of the three

## Visualizations

### 2.1 Dimension Filter



## City filter

The image shows two screenshots of the 'Filter [City]' dialog box. The left screenshot shows the 'General' tab with 'Use all' selected. The right screenshot shows the 'Top' tab with 'By field' selected, setting the limit to 10 by SUM of Profit.

**Filter [City] - General Tab**

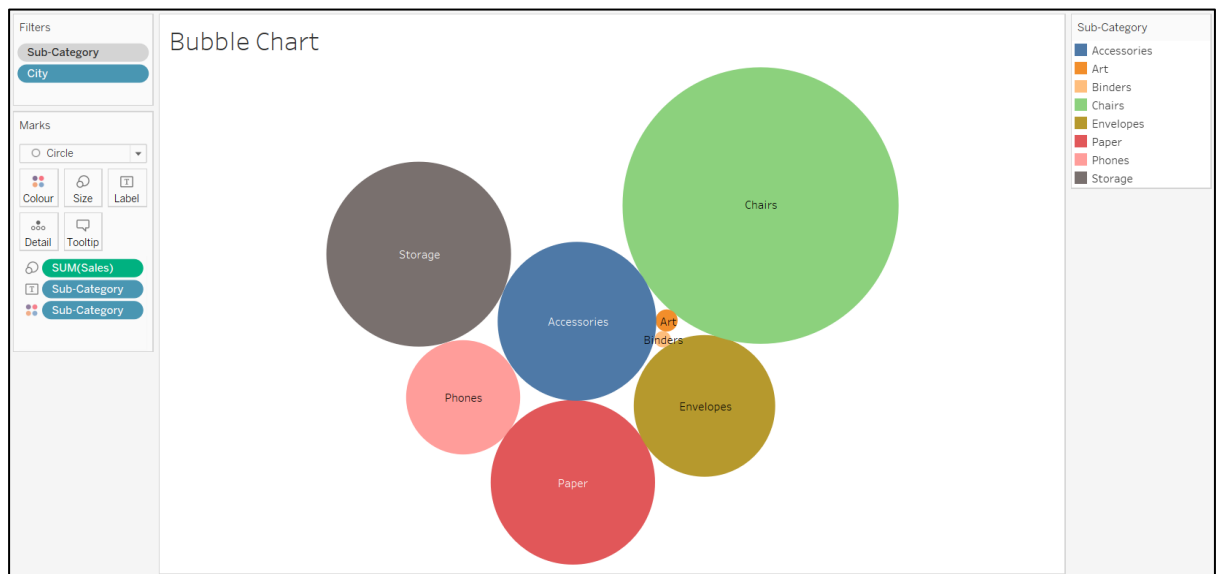
- General | Wildcard | Condition | Top
- ☐ Select from list ☐ Custom value list ☒ Use all
- Field: [City]
- Selection: All
- Wildcard: All
- Condition: None
- Limit: Top 10 by SUM([Profit])
- Buttons: Reset, OK, Cancel, Apply

**Filter [City] - Top Tab**

- General | Wildcard | Condition | Top
- ☐ None
- ☒ By field:
- Top | 10 | by
- Profit | Sum
- ☐ By formula:
- Top | 10 | by
- Buttons: Reset, OK, Cancel, Apply

The filter is applied such that among all the cities, the top 10 cities by the sum of sales is selected.

## 2.2 Context Filter



## City filter

Filter [City]

General Wildcard Condition Top

☒ Select from list ☐ Custom value list ☐ Use all

Enter search text

☐ Bloomington  
☐ Bristol  
☒ Charlotte  
☒ Chicago  
☒ Columbia  
☒ Columbus  
☒ Concord  
☐ Decatur  
☐ Dover  
☐ Durham  
☐ Eagan

All None ☐ Exclude

Summary

Field: [City]  
Selection: Selected 5 of 44 values  
Wildcard: All  
Condition: None  
Limit: None

Reset OK Cancel Apply

The filter is applied such that among all cities, cities whose name starts with ‘C’ are selected.

## Sub – Category filter

Filter [Sub-Category]

General Wildcard Condition Top

☐ Select from list ☐ Custom value list ☒ Use all

All None ☐ Exclude

Summary

Field: [Sub-Category]  
Selection: All  
Wildcard: All  
Condition: None  
Limit: Top 8 by SUM([Profit])

Reset OK Cancel Apply

Filter [Sub-Category]

General Wildcard Condition Top

☐ None  
☒ By field:

Top 8 by Sum

Profit Sum

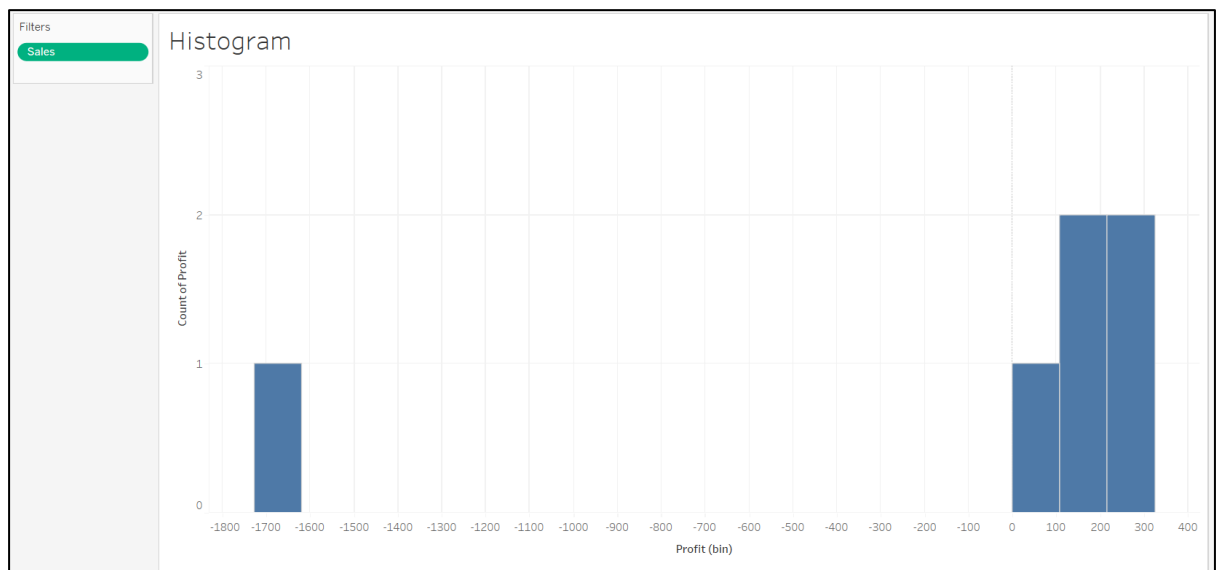
☐ By formula:

Top 10 by

Reset OK Cancel Apply

The filter is applied such that among all sub-categories the top 8 sub-categories by profit is selected. This filter is added to context

## 2.3 Measure Filter



### Sales filter

The "Filter [Sales]" dialog box is shown. It has four tabs: "Range of values", "At least", "At most", and "Special". The "At least" tab is selected. Below the tabs, there are two input fields: "1,000" and "3,083.43". A slider is positioned between these two values. Below the slider, the values "1.248" and "3083.43" are displayed. At the bottom, there is a "Show:" dropdown menu set to "Only Relevant Values" and an unchecked checkbox for "Include Null Values". The "OK" button is highlighted.

Filter [Sales]

Range of values | **At least** | At most | Special

At least

1,000 | 3,083.43

1.248 | 3083.43

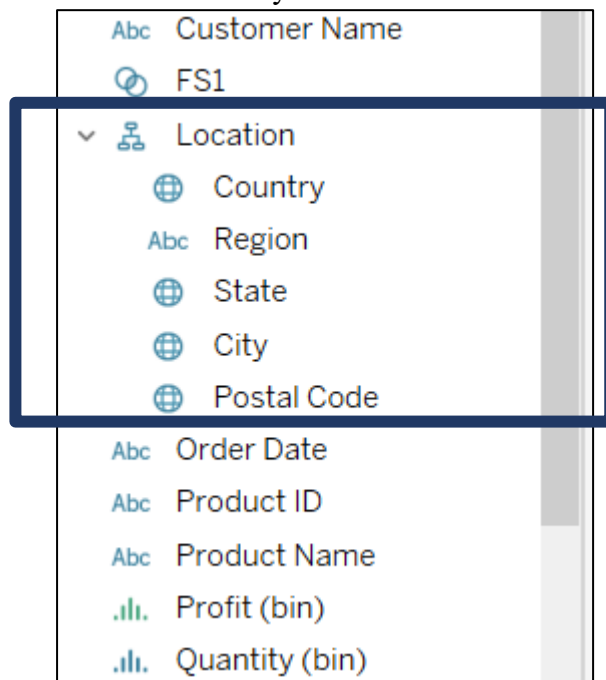
Show: Only Relevant Values | ☐ Include Null Values

Reset | **OK** | Cancel | Apply

The filter is the sales value must be above 1000.

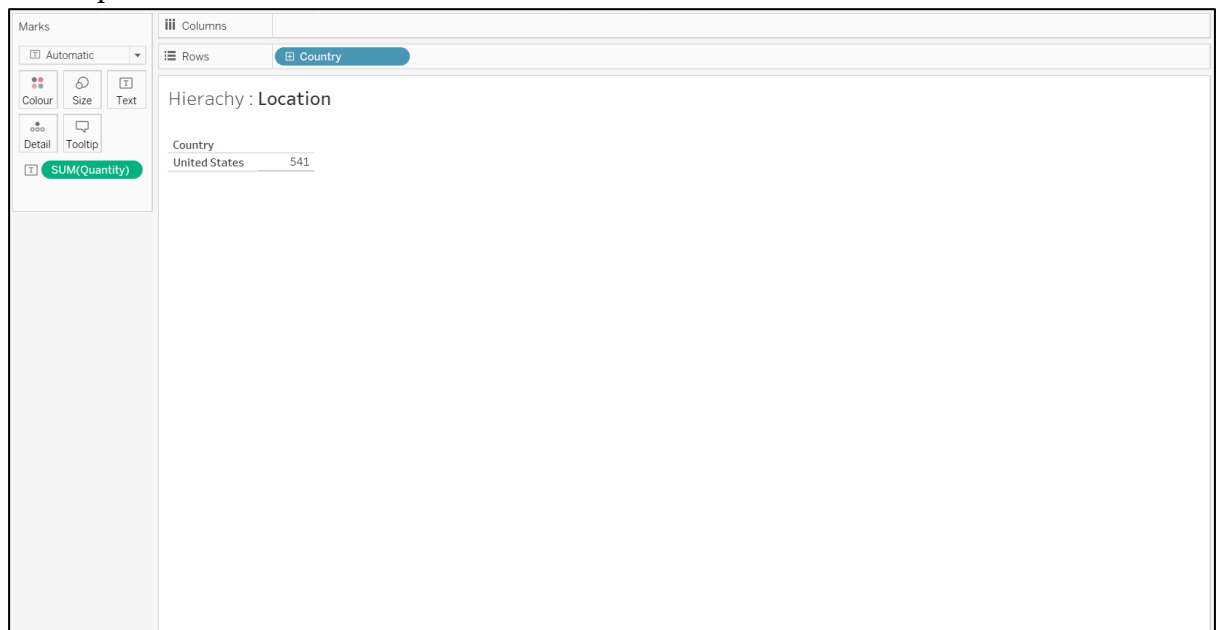
3. Perform the following data manipulations on your dataset

- create a Hierarchy



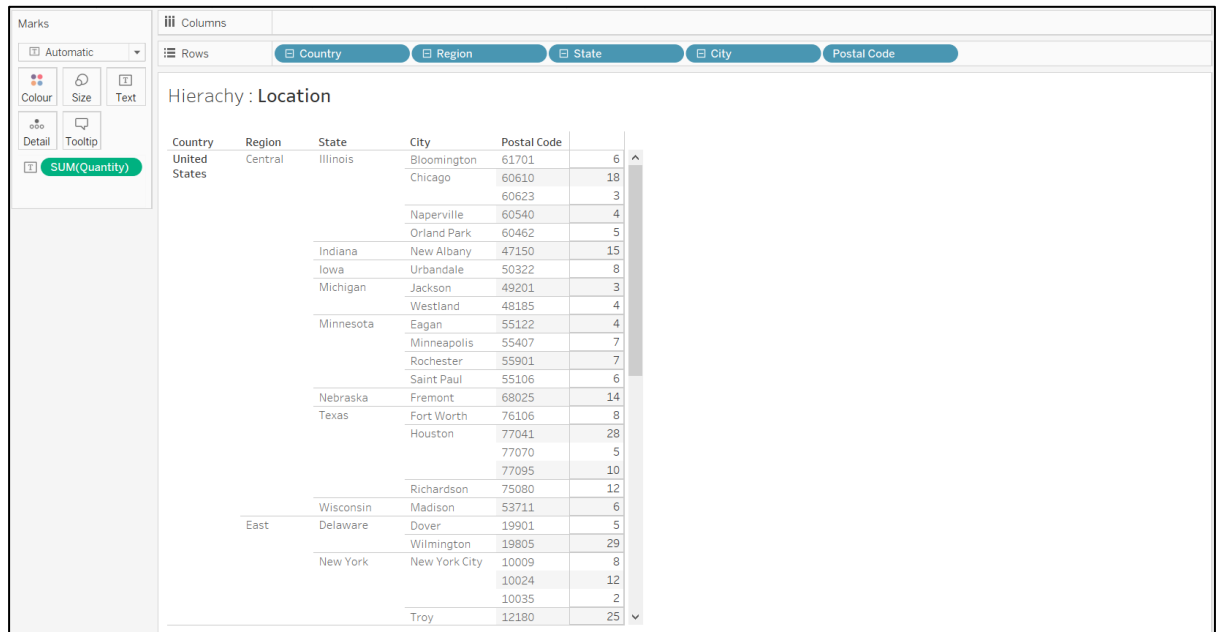
A **Location** hierarchy is created from **Country, Region, State, City, Postal Code**.

Drill Up

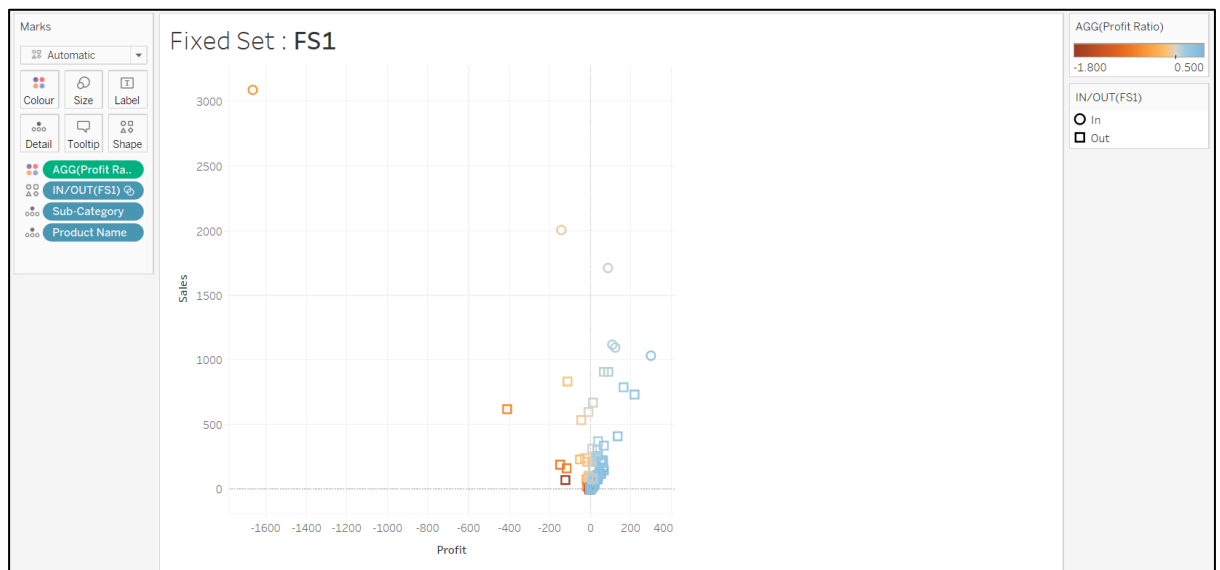




## Drill Down



- create a set
  - Fixed Set



A FS1 fixed set is created by randomly selecting points from the above scatter chart.

FS1

Edit Set [FS1]

Name: FS1

Members (6 total):

Product Name	Sub-Category
AT&T CL83451 4-Han...	Phones
Bretford CR4500 Serie...	Tables
Chromcraft Rectangul...	Tables
GE 30524EE4	Phones
Hunt BOSTON Model ...	Art
Riverside Palais Royal...	Bookcases

Separate members by , AT&T CL83451 4-Handset Telephone, Phones

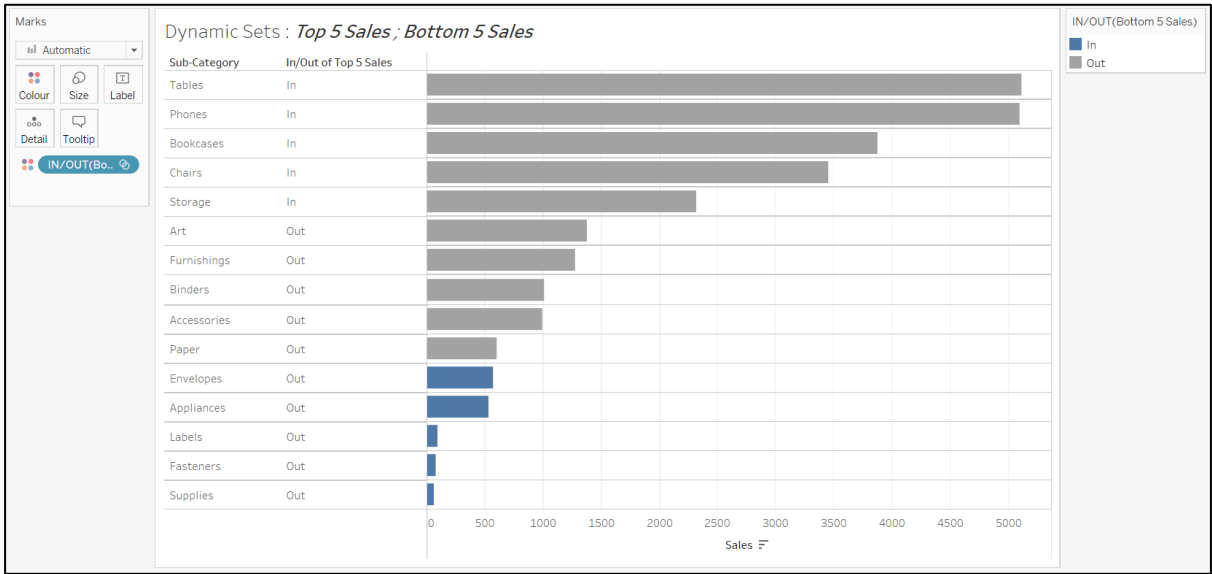
Copy

OK

Cancel

Apply

Dynamic Sets



Two dynamic sets are created.

## Top 5 Sales

The image displays two screenshots of the 'Edit Set [Top 5 Sales]' dialog box, showing the configuration for the 'Top 5 Sales' set.

**Left Screenshot (General Tab):**

- Name: Top 5 Sales
- General tab selected.
- Options: ☐ Select from list, ☐ Custom value list, ☒ Use all
- Summary section:
  - Field: [Sub-Category]
  - Selection: All
  - Wildcard: All
  - Condition: None
  - Limit: Top 5 by SUM([Sales])
- Buttons: Reset, OK, Cancel, Apply

**Right Screenshot (Top Tab):**

- Name: Top 5 Sales
- General, Condition, Top tabs.
- Options: ☐ None, ☒ By field:
- By field configuration:
  - Top: Top (dropdown), 5 (text box), by (dropdown)
  - Sales: Sales (dropdown), Sum (dropdown)
- By formula: ☐ By formula: (disabled)
- Buttons: Reset, OK, Cancel, Apply

The **Top 5 Sales** set consists of top 5 sub – categories by sum of sales.

## Bottom 5 Sales

The image displays two screenshots of the 'Edit Set [Bottom 5 Sales]' dialog box, showing the configuration for the 'Bottom 5 Sales' set.

**Left Screenshot (General Tab):**

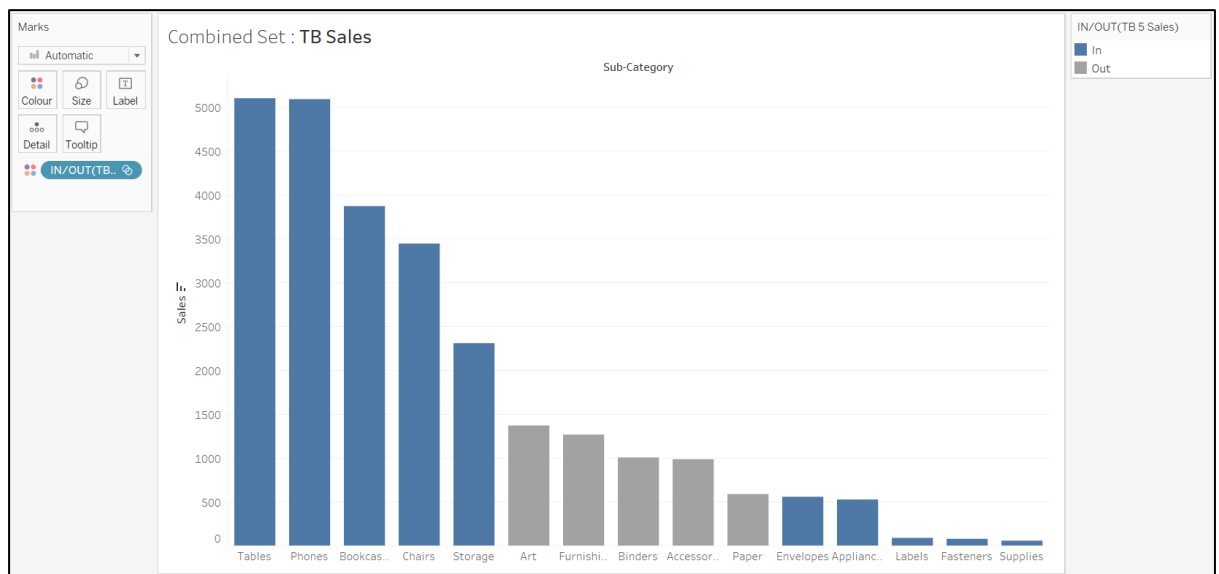
- Name: Bottom 5 Sales
- General tab selected.
- Options: ☐ Select from list, ☐ Custom value list, ☒ Use all
- Summary section:
  - Field: [Sub-Category]
  - Selection: All
  - Wildcard: All
  - Condition: None
  - Limit: Bottom 5 by SUM([Sales])
- Buttons: Reset, OK, Cancel, Apply

**Right Screenshot (Top Tab):**

- Name: Bottom 5 Sales
- General, Condition, Top tabs.
- Options: ☐ None, ☒ By field:
- By field configuration:
  - Bottom: Bottom (dropdown), 5 (text box), by (dropdown)
  - Sales: Sales (dropdown), Sum (dropdown)
- By formula: ☐ By formula: (disabled)
- Buttons: Reset, OK, Cancel, Apply

The **Bottom 5 Sales** set consists of bottom 5 sub – categories by sum of sales.

## ○ Combined Set



A **TB 5 Sales** combined set is creating from every member of Top 5 and Bottom 5 Sales.

Edit Set [TB 5 Sales]

Name:

How would you like to combine the two sets?

Sets:  ☒

☒ All members in both sets

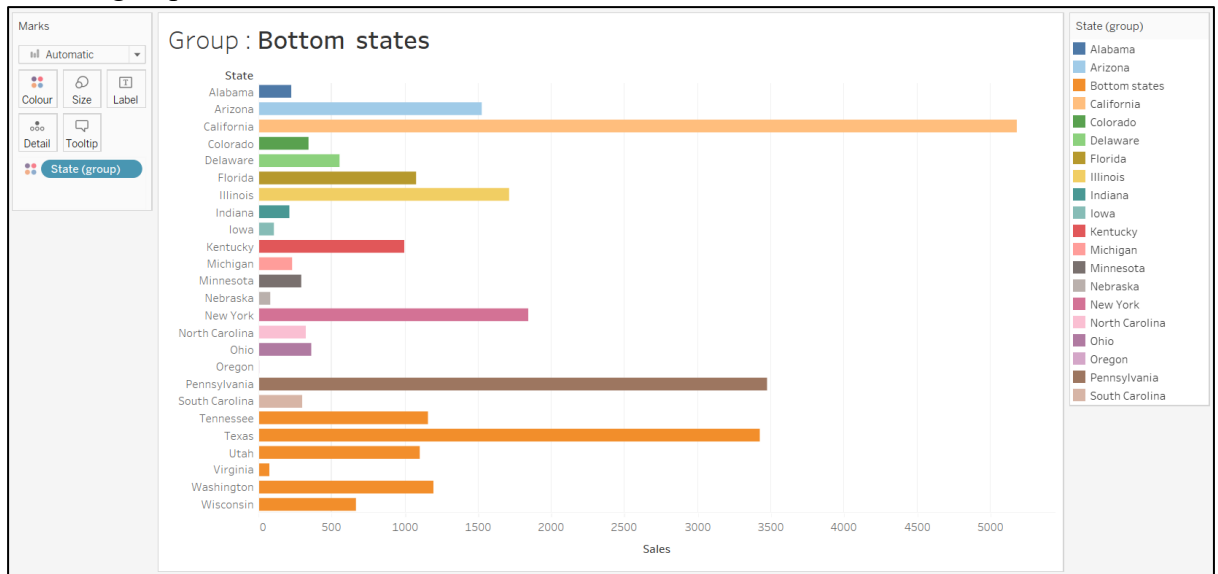
☐ Shared members in both sets

☐ "Bottom 5 Sales" except shared members

☐ "Top 5 Sales" except shared members

Separate members by  East, Green Tea, 2012

- create a group



A **Bottom States** group is created by the last 6 states by alphabetical order.

## Bottom States

Create Group [State]

Field Name: State (group)

Groups: Add to: [Dropdown]

- Delaware
- Florida
- Illinois
- Indiana
- Iowa
- Kentucky
- Michigan
- Minnesota
- Nebraska
- New York
- North Carolina
- Ohio
- Oregon
- Pennsylvania
- South Carolina
- Bottom States (selected)
- Tennessee
- Texas
- Utah
- Virginia
- Washington
- Wisconsin

Group Rename Ungroup ☒ Show Add Location

☐ Include 'Other' Find >>

Reset OK Cancel Apply